



December 21, 2012

Sondra Ruckwardt, Project Manager
U.S. Army Corps of Engineers, Portland District
P.O. Box 2946 Portland, Oregon 97208
Cormorant-EIS@usace.army.mil

Dear Ms. Ruckwardt,

Please accept the following scoping comments on behalf of the Audubon Society of Portland and our 13,000 members in Oregon regarding the US Army Corps of Engineers ("USACOE") proposed Environmental Impact Statement ("EIS") for potential reduction of double-crested cormorants (*Phalacrocorax auritus*) ("DCC") on East Sand Island ("ESI"). We support the Corps' decision to conduct a full EIS and appreciate the opportunity to comment at the scoping phase. We would note that apparently early communications from the USACOE to Portland Audubon regarding the scoping effort were not received. Going forward please send all relevant communications to the following contact:

Bob Sallinger, Conservation Director
Audubon Society of Portland
5151 NW Cornell Road
Portland, OR 97210
(503) 292-9501 ext 110
bsallinger@audubonportland.org

The East Sand Island double-crested cormorant population represents the largest double-crested cormorant breeding colony in the North America representing nearly 40% of the western population. Extreme care must be taken to ensure that any efforts to relocation or control the population on East Sand Island do not cause unintended consequences for populations in the Western United States.

The current breeding population of double-crested cormorants in western North America is estimated to be 29,240 breeding pairs with 26,390 pairs located in British Columbia, Washington, Oregon, and California. (*A Status Assessment Of The Double-Crested Cormorant In Western North America*: 1998-2009 at 8). Approximately 13,000 of these pairs nest on East Sand Island representing 40% of the western breeding population (USACOE EIS Scoping Background Materials). Overall DCC populations are increasing at a rate of approximately 3% a year but that increase appears to be tied entirely to the populations at East Sand Island and a "few inland sites" (*Status Report* at page 8). In fact, DCC breeding populations are actually declining throughout much of the species' west coast range including breeding populations in British Columbia, Northern Washington and Southern California (*Status Report* at 8). Breeding populations in coastal British Columbia have been reduced by as much as 80% since 1987 (*Status Report* at 20). Breeding pairs along the Washington coast are estimated to have been reduced 51% between 1991 and 2009 (*Status Report* at 23). In California, coastal breeding

populations dropped from 6,575 breeding pairs in 2001-2003 to 4,994 in 2008 with declines as high as 41% along the north coast and 34% along the central coast (*Status Report* at 24). The productivity of the East Sand Island colony represents the difference between an increasing western population and a stable or even potentially decreasing population. Breeding population declines throughout the vast majority of the western coastal range of this species should be of fundamental concern for management agencies, as opposed to the current narrow focus on finding ways to reduce DCC populations at the one location where populations appear to be thriving.

Any effort to control or relocate double-crested cormorant populations on East Sand Island must consider the broader landscape context in which these actions would occur and adopt a holistic approach to DCC management along the West Coast. Double-crested cormorants currently face a variety of challenges throughout their range including persecution from humans, changing ocean conditions, reduction in forage fish populations, contaminants, and impacts from predators such as bald eagles. Any approach must also consider the natural history of DCCs which makes relocation of this species more difficult and uncertain than for example Caspian terns which also face population reduction efforts on East Sand Island. It is not clear that cormorants actually would respond favorably to relocation efforts, and it is far from certain, in fact unlikely, that they would receive a positive reception from human populations if in fact they did attempt to establish breeding populations elsewhere. It is also uncertain that natural conditions would support long-term stability of these populations given that there is far from complete understanding of why breeding colonies along the majority of the species' range along west coast appear to be declining and winking out.

Antagonism toward this species due to its potential impacts on salmonid populations has become shrill, unmoored from the scientific literature and disproportionate to the actual impacts of this species relative to other causes of salmonid declines. Unfortunately this hyperbole has too often been amplified by the management agencies themselves. We would point for example by recent proposal by the Oregon Department of Fish and Wildlife to engage in lethal control of DCC breeding populations at sites along the Oregon Coast absent any first hand data about the impacts of DCC's at the sites targeted for control.

In fact, the DCC populations at East Sand Island have a relatively minimal impact on salmon mortality. The 2011 report, *Benefits to Columbia River Anadromous Salmonids from Potential Reductions in Predation by Double-crested Cormorants Nesting at the East Sand Island Colony* by Lyons *et al.* states the following:

Potential increases in λ ($\Delta\lambda$) for complete elimination of predation by East Sand Island double-crested cormorants, assuming no other mortality factors would compensate for this reduction in predation, ranged from 0.6 – 1.2% for Chinook salmon ESUs originating above Bonneville Dam, was 1.6% for the Snake River sockeye salmon ESU, and ranged from 1.9 – 2.5% for steelhead DPSs originating above Bonneville Dam. If a moderate level of compensatory smolt mortality (e.g., 50%) occurred in response to a complete elimination of cormorant predation, $\Delta\lambda$ values would drop below 1% for Chinook and sockeye salmon ESUs, but remain 1% or greater for steelhead DPSs...

As seen with other analyses of avian predation, potential benefits to ESA-listed DPSs/ESUs of Columbia Basin salmonids from reductions in predation by East Sand Island double-crested cormorants are smaller than the total expected benefits projected from all recovery actions included in the proposed management of the Federal Columbia River Power System (FCRPS). Benefits from cormorant management would not ensure recovery of any of the eight ESA-listed salmonid populations we analyzed, but are comparable to other individual

recovery actions included in the 2008 Biological Opinion on the management of the FCRPS. (Report at 2-3).

We are concerned that DCC cormorants have increasingly become a convenient scapegoat for declining salmonid populations, far disproportionate with their actual impact, while the fundamental causes for salmonid decline, dam operations, go unresolved. We are also concerned about the growing trend towards investing huge sums of taxpayer dollars to control and manipulate more abundant native species to benefit imperiled species. While there are extreme circumstances where this approach make sense on a limited basis, we question the sustainability, cost effectiveness and ecological integrity of applying this type of approach at large and larger geographic scales, to a growing list of species, over longer and longer time frames. In the specific case of cormorants on East Sand Island, we question whether the costs, low probability of success of relocation efforts, and declining population status of the species throughout much of the western coastal population, does not suggest that those resources would be more beneficially applied to other strategies to benefit samonids.

The following are our specific comments:

1. **The EIS should consider any proposed actions on East Sand Island within the context of cumulative impacts of DCC nestling colony reductions along the West Coast.** It is important the USACOE take a holistic approach to any DDC relocation or population control efforts. The EIS should carefully consider overall population trends, the potential population impacts of other colony reduction efforts throughout the DCC's range, and potential current and future threats to DCC populations including changing ocean conditions, reduction in forage fish populations, contaminants, climate change and impacts of predation from species such as bald eagles.
2. **The EIS should specifically identify sites where dispersed DCC populations would be accepted and protected:** The Corps cannot ignore the fact that both legal and illegal DCC control efforts are being considered and implemented up and down the west coast. It would be irresponsible to disperse East Sand Island populations without specifically and comprehensively identifying locations where DCC populations will be accepted and permanently protected. Failing to assess this concern would potentially result in shifting of populations to even more problematic locations. Moreover, failing to assess this concern could potentially place DCC populations at risk of decline in the Western United States.
3. **The EIS should carefully consider the life history of double-crested cormorants in considering whether relocation is a viable alternative:** USACOE should determine the viability of attracting DCC cormorants to specific sites should dispersal be determined to be the preferred alternative. We question whether it is feasible, even with aggressive hazing activity on ESI, to draw DCC cormorants significant distances from the estuary to sites that may be more preferable from a salmonid management perspective. DCC appear to have a low proclivity for investigating nesting opportunities over wide geographic areas and therefore present significantly different challenges than the relocation efforts focused on Caspian terns that are currently underway on ESI. We are concerned that cormorants could be pushed to sites (both inside and outside the estuary) that are even more problematic than ESI, that they could be pushed onto other parts of ESI thus impacting other species of concern on the island, or that they could be precluded from nesting altogether.
4. **The EIS should carefully assess the cost and benefits of controlling or relocating DCC populations on East Sand Island.** We question whether the relatively small benefits to samonid populations described in the 2011 report by Lyons *et al.* justify the expense of efforts to limit DCC

populations on ESI. The USACOE should carefully assess whether this is the best use of limited resources or if they would be better applied to other salmonid recovery efforts.

5. **The EIS should carefully consider potential impacts of DCC control efforts on other species utilizing ESI:** ESI is home to a variety of populations of concern including breeding populations of streaked horned larks (*Eremophila alpestris strigata*) (currently proposed for listing under the Endangered Species Act), a roost for brown pelicans (*Pelecanus occidentalis*), and home to the largest colony of breeding Caspian terns (*Sterna caspia*) in the world.
6. **Lethal take options should be avoided:** We do not believe that the level of impact on listed salmonids justifies a reliance upon lethal take options. This would add a huge element of controversy to any proposal and we believe would set the precedent for similar unacceptable actions throughout the species range. If in fact the USACOE is considering lethal control, we would urge the agencies to consider incorporating an analysis of the ethics of this type of approach similar to what was recently conducted for barred owls.
7. **The USACOE should provide an analysis of whether additional native species in the Columbia Corridor are likely to require control activities in the foreseeable future to benefit salmonid recovery:** We would note that the list of species being controlled either through relocation or lethal take already includes Caspian terns, sea lions and a variety of piscivorous bird via the actions of USDA Wildlife Services at dams and hatcheries. It is important that the public be able to understand the scope and scale of manipulation of native wildlife populations that will be involved over time so that it can make an educated determination of the viability of this approach relative to other salmon recovery initiatives.
8. **The short and long-term impacts of climate change should be considered.** Specifically UACOE should consider potential impacts of how lower levels of snowpack in the mountains may influence conditions in the Columbia River Estuary particularly with regards the arrival time of forage fish as well as how DCC populations may redistribute themselves over time.
9. **USACOE and FWS should approach this issue from the perspective of developing long-term sustainable strategies for both protecting salmonid populations AND protecting double-crested cormorant populations:** To date this discussion has been driven almost exclusively by a single-minded focus on impacts to salmonids. This narrow approach has resulted in a situation where short and long term impacts on DCC are ignored and neglected and also in an atmosphere where DCCs have become singularly vilified. The level of acrimony that has been generated toward this species is remarkable and ultimately is at odds with ecologically responsible and sustainable management strategies. In fact it has been highly counter-productive, resulting in an situation where the best solutions may be foreclosed because of scientifically unsupported, local antipathy toward double-crested cormorants, where cormorants may be hazed or controlled at locations where populations should actually be supported, and where illegal activities related to cormorants proliferate. It has not lost on us that the federal and state agencies on several occasions have cited a concern about potential illegal control of DCCs on East Sand Island as a basis for management activities. We believe that the tone and tenor of discussions pertaining to double-crested cormorants, some of it emanating from the agencies themselves, that generates this type of atmosphere. It is important to return this discussion to a basis in sound science.

The federal agencies however have a broad mandate to protect all of our native species. We urge USACOE and FWS to approach this issue with a dual objective of protecting both salmonid and DCC populations. With regards to DCCs that means developing strategies that consider what type of population distribution will result in long-term stability for western, and particularly west coast, populations. We recognize that having such a large percentage of the western DCC breeding

population at a single location may ultimately leave the population vulnerable to a variety of manmade and natural events. However, should dispersal be the best alternative, that approach needs to be coupled with a strategy that will ensure that DCC populations remain stable throughout the historic range of the species and which ensure that decision-makers and the public recognize and appreciate the importance of protecting this species.

We appreciate the decision by the Corps to conduct an EIS. We believe that this is the correct level of analysis for a decision of this magnitude. We urge the Corps to carefully incorporate concerns about the welfare and stability of double-crested cormorants into this analysis and adopt a holistic approach that ensures that DCC populations along the west coast will remain stable and protected. From our perspective this means carefully assessing whether it is in the best interests of cormorants to redistribute a portion of the breeding populations on ESI and if so, identifying receiving sites, giving careful consideration to the causes of DCC breeding population declines along the vast majority of the west coast, and creating an ethic, via science-based outreach, that recognizes the importance of protecting and maintaining this native species.

We do not believe that this objective can be accomplished if the Corps focuses myopically on simply reducing the impacts to salmonids at East sand Island. Taking this type of limited approach could easily result in a situation that exacerbates rather than resolves problems by simply shifting predation to other sites inside or beyond the estuary and/ or by destabilizing the west coast population of federally protected double-crested cormorants. Again, we would emphasize that this issue cannot be adequately considered outside of the context of multiple DCC control actions that are currently being considered along the west coast.

We urge you to carefully consider whether action is even warranted on East Sand Island based upon their proportionately small impacts on salmon relative to other natural and anthropogenic impacts throughout the Columbia River system. Right now, we are far from convinced that the benefits outweigh the potential economic and ecological costs.

Thank you for your consideration of our comments. We would be happy to meet with USACOE and other agencies to discuss these comments if it would be helpful.

Sincerely,



Bob Sallinger
Conservation Director
Audubon Society of Portland

Audubon Society of Portland
5152 NW Cornell Road
Portland, OR 97210
(503) 292-6855
www.audubonportland.org